

October 30, 2001

Mike Henderson  
Warner Bodies, Inc.  
P. O. Box 20767  
Noblesville, IN 46061

Re: Registered Operation Status,  
057-14829-00043

Dear Mr. Henderson:

The application from Warner Bodies, Inc., received on August 24, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following emission units, to be located at 1699 South 8<sup>th</sup> Street, Noblesville, Indiana, is classified as registered:

- (a) One (1) coating booth, identified as wreckers, utilizing air assisted airless spray application, maximum throughput of eighteen (18) units per week, using dry filters as controls.
- (b) One (1) coating booth, identified as utility bodies, utilizing air assisted airless spray application and HVLP application, using dry filters as controls.
- (c) Two (2) bake ovens, identified as oven #1 and oven # 2, each with maximum heat capacity of 5.7 MMBTU/hr.
- (d) Forty-two (42) gas metal arc welding stations, total maximum throughput of 144,000 pounds per year.
- (e) Six (6) heating units, fueled by natural gas, with a total maximum heat capacity of 3.31 MMBTU/hr.

The following conditions shall be applicable:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the surface coating and welding units shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand

(60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the surface coating booths are in operation, in order to comply with this limit.

For a process rate of thirty four (34) vehicles (weighing 6 tons each) per week, or 1.21 tons per hr, the maximum total allowable PM emission from the welding facilities shall be 4.66 lbs per hour.

This registration is a re- registration issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section  
Office of Air Quality  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, IN 46206-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

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cc: File - Hamilton County  
Hamilton County Health Department  
Air Compliance - Mark Goldman  
Permit Tracking - Janet Mobley  
Technical Support and Modeling - Michele Boner  
Compliance Data Section - Karen Nowak

<b>Registration Annual Notification</b>
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This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

<b>Company Name: Warner Bodies, Inc.</b>
<b>Address: 1699 South 8<sup>th</sup> Street</b>
<b>City: Noblesville, IN</b>
<b>Authorized individual:</b>
<b>Phone #:</b>
<b>Registration #: 057-14829-00043</b>

I hereby certify that Warner Bodies, Inc. is still in operation and is in compliance with the requirements of Registration 057-14829-00043.

<b>Name (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

# **Indiana Department of Environmental Management Office of Air Quality**

## **Technical Support Document (TSD) for a Registration**

### **Source Background and Description**

**Source Name:** Warner Bodies, Inc.  
**Source Location:** 1699 South 8<sup>th</sup> Street, Noblesville, IN 46061  
**County:** Hamilton  
**SIC Code:** 7532  
**Operation Permit No.:** 057-14829-00043  
**Permit Reviewer:** Madhurima D. Moulik

The Office of Air Quality (OAQ) has reviewed an application from Warner Bodies, Inc. relating to the operation of a vehicle body manufacturing facility.

### **Emission Units and Pollution Control Equipment**

The source consists of the following emission units and pollution control devices:

- (a) One (1) coating booth, identified as wreckers, utilizing air assisted airless spray application, maximum throughput of eighteen (18) units per week, using dry filters as controls.
- (b) One (1) coating booth, identified as utility bodies, utilizing air assisted airless spray application and HVLP application, maximum throughput of sixteen (16) units per week, using dry filters as controls.
- (c) Two (2) bake ovens, identified as oven #1 and oven # 2, each with maximum heat capacity of 5.7 MMBTU/hr.
- (d) Forty-two (42) gas metal arc welding stations, total maximum throughput of 144,000 pounds per year.
- (e) Six (6) heating units, fueled by natural gas, with a total maximum heat capacity of 3.31 MMBTU/hr.

### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 057-6273-00043, issued on September 25, 1996.

All conditions from previous approvals were incorporated into this permit.

## Enforcement Issue

IDEM is aware that under rule 326 IAC 2-5.5-2, the deadline for the application was December 28, 2000. This matter is being referred to the Enforcement branch which will take appropriate action. This proposed permit is intended to satisfy the requirements of the operating permit rules.

## Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 24, 2001. Additional information was received on September 21, 2001.

## Emission Calculations

See Appendix A of this document for detailed emissions calculations.

## Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	18.36
PM-10	18.36
SO <sub>2</sub>	negligible
VOC	15.8
CO	5.4
NO <sub>x</sub>	6.4

HAP's	Potential To Emit (tons/year)
Toluene	1.01
Methyl Isobutyl Ketone	0.47
Methyl Ethyl Ketone	8.5
4,4, Diphenylmethane diisocyanate	0.3
Combination HAPs	13.17

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is less than twenty-five (25) tons per year. Therefore, the source is

not subject to the provisions of 326 IAC 2-7.

### County Attainment Status

The source is located in Hamilton County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Hamilton County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Hamilton County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Federal Rule Applicability

- (a) The New Source Performance Standards (NSPS) (40 CFR 60 Subpart MM) is applicable to "automobile or light duty truck assembly plant". This source is a vehicle body manufacturing operation. Subpart MM contains no definition of an "automobile or light duty truck assembly plant". The dictionary definition of assembly is "the fitting together of manufactured parts into a complete machine, structure, or unit of a machine". This operation does not perform any assembly work. Therefore this rule does not apply.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

### State Rule Applicability - Entire Source

#### 326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because the Potential to Emit of CO, VOC, NO<sub>x</sub>, PM-10, and SO<sub>2</sub> is less than one hundred (100) tons per year.

#### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### **State Rule Applicability - Individual Facilities**

#### **326 IAC 8-2-1 (Surface coating emission limitations)**

Pursuant to 326 IAC 8-2-1, the wrecker booth is exempt from Article 8 rules since the actual emissions are less than fifteen (15) pounds per day.

#### **326 IAC 8-2-2 (Surface coating emission limitations: automobile and light duty truck coating operations)**

According to 326 IAC 8-2-2(b), emission limitations in this rule applies to "automotive or light duty truck assembly plant". For the same reason that NSPS Subpart MM did not apply, 326 IAC 8-2-2 does not apply.

#### **326 IAC 8-2-9 (Miscellaneous metal coating operations)**

The operation is the customized topcoating of truck bodies. The maximum number of vehicles processed at the utility surface coating facilities is less than thirty-five (35) per day. Additionally, the SIC for this operation is 7532. This is outside of the SICs listed in 8-2-9. Therefore, this operation would also be exempt from 326 IAC 8-2-9 for this reason. Therefore, 326 IAC 8-2-9 does not apply.

#### **326 IAC 8-1-6 (General provisions relating to VOC rules: general reduction requirements for new facilities)**

The potential emissions of VOCs from the utility booth is less than twenty-five (25) tons per year. Therefore, 326 IAC 8-1-6 does not apply.

#### **326 IAC 6-3-2 (Process Operations)**

The particulate matter (PM) from the surface coating units shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the surface coating booths are in operation, in order to comply with this limit.

For a process rate of thirty four (34) vehicles (weighing 6 tons each) per week, or 1.21 tons per hr, the maximum total allowable PM emission from the welding facilities shall be 4.66 lbs per hour. The welding facilities at this source are in compliance with this rule.

### **Conclusion**

The operation of this vehicle body manufacturing facility shall be subject to the conditions of the attached proposed Registration 057-14829-00043.

**Appendix A: Emissions Calculations****Natural Gas Combustion Only****MM BTU/HR <100****Bake Ovens and Space Heaters****Company Name: Warner Bodies, Inc.****Address City IN Zip: 1699 South 8th Street, Noblesville, IN****CP: 057-14829****Pit ID: 057-00043****Reviewer: Madhurima D. Moulik****Date: Sep 14, 2001**Heat Input Capacity  
MMBtu/hrPotential Throughput  
MMCF/yr

14.7

128.9

Pollutant						
Emission Factor in lb/MMCF	PM* 7.6	PM10* 7.6	SO2 0.6	NOx 100.0 **see below	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.5	0.5	0.0	6.4	0.4	5.4

\*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations**

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**Natural Gas Combustion Only****MM BTU/HR <100****Bake Ovens and Space Heaters****HAPs Emissions****Company Name: Warner Bodies, Inc.****Address City IN Zip: 1699 South 8th Street, Noblesville, IN****CP: 057-14829****Plt ID: 057-00043****Reviewer: Madhurima D. Moulik****Date: Sep 14, 2001****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.353E-04	7.732E-05	4.832E-03	1.160E-01	2.191E-04

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	3.221E-05	7.087E-05	9.020E-05	2.448E-05	1.353E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.







**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**Surface Coating**

**Wrecker Booth**

**Company Name: Warner Bodies, Inc.**

**Address City IN Zip: 1699 South 8th Street, Noblesville, IN**

**CP: 057-14829**

**Pit ID: 057-00043**

**Reviewer: Madhurima D. Moulik**

**Date: Sep 21, 2001**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Eff *
Thinner	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	0.33	0.11	6.93	6.93	0.24	5.87	1.07	0.00	0%
MEK	6.7	100.00%	0.0%	100.0%	0.0%	0.00%	0.78	0.11	6.72	6.72	0.56	13.46	2.46	0.00	0%
Primer Mixture	14.1	19.80%	0.0%	19.8%	0.0%	80.20%	1.00	0.11	2.78	2.78	0.30	7.15	1.30	3.17	40%

\* The transfer efficiency from air atomized spray is 30-50% (AP-42)

**Potential To Emit (Tons/year) =**

**4.83**

**3.17**

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations**

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**Natural Gas Combustion Only**

**HAPs - Surface coating**

**Wrecker Booth**

**Company Name: Warner Bodies, Inc.**

**Address City IN Zip: 1699 South 8th Street, Noblesville, IN**

**CP: 057-14829**

**Plt ID: 057-00043**

**Reviewer: Madhurima D. Moulik**

**Date: Sep 24, 2001**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Toluene	Weight % MIBK	Weight % MEK	Weight % 4,4 Diphenylmethan e Diisocyanate	Toluene Emissions (ton/yr)	MIBK Emissions (ton/yr)	MEK Emissions (ton/yr)	4,4 Diphenylmethan e Diisocyanate Emissions (ton/yr)
Thinner	6.93	0.33	0.11	29.00%	4.00%	4.00%	0.00%	0.32	0.04	0.04	0.00
MEK	6.72	0.78	0.11	0.00%	0.00%	100.00%	0.00%	0.00	0.00	2.53	0.00
Primer	14.06	1.00	0.11	0.00%	2.56%	0.00%	2.34%	0.00	0.17	0.00	0.16

**Potential to Emit (tons/yr) =**

**0.32**

**0.22**

**2.57**

**0.16**

**Combination HAPs (tons/yr) =**

**3.27**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**Surface coating**

**Utility Booth**

**Company Name: Warner Bodies, Inc.**

**Address City IN Zip: 1699 South 8th Street, Noblesville, IN**

**CP: 057-14829**

**Pit ID: 057-00043**

**Reviewer: Madhurima D. Moulik**

**Date: Sep 21, 2001**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency
Thinner	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	0.83	0.095	6.93	6.93	0.55	13.11	2.39	0.00	0%
MEK	6.7	100.00%	0.0%	100.0%	0.0%	0.00%	2.00	0.095	6.72	6.72	1.28	30.64	5.59	0.00	0%
Primer	14.8	19.70%	0.0%	19.7%	0.0%	80.10%	1.00	0.095	2.92	2.92	0.28	6.65	1.21	2.97	40%
Topcoat	9.7	35.80%	0.0%	35.8%	0.0%	64.20%	1.00	0.095	3.48	3.48	0.33	7.94	1.45	0.52	80%

**Potential To Emit (Tons/Year) =**

**10.65**

**3.49**

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations**

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**Natural Gas Combustion Only**

**HAPs- Surface coating**

**Utility Booth**

**Company Name: Warner Bodies, Inc.**

**Address City IN Zip: 1699 South 8th Street, Noblesville, IN**

**CP: 057-14829**

**Plt ID: 057-00043**

**Reviewer: Madhurima D. Moulik**

**Date: Sep 24, 2001**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Toluene	Weight % MIBK	Weight % MEK	Weight % 4,4 Diphenylmethane Diisocyanate	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	EthylBenzene Emissions (ton/yr)
Thinner	6.93	0.83	0.10	29.00%	4.00%	4.00%	0.00%	0.69	0.10	0.10	0.00
MEK	6.72	2.00	0.10	0.00%	0.00%	100.00%	0.00%	0.00	0.00	5.59	0.00
Primer	14.06	1.00	0.10	0.00%	2.56%	0.00%	2.35%	0.00	0.15	0.00	0.14
Topcoat	9.73	1.50	0.10	0.00%	0.00%	3.91%	0.00%	0.00	0.00	0.24	0.00

**Potential to Emit (tpy) =**

<b>0.69</b>	<b>0.25</b>	<b>5.93</b>	<b>0.14</b>
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**Potential to Emit of Comb. HAPs (tpy) =**

<b>7.00</b>
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HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

**Appendix A: Emissions Calculations  
Welding and Thermal Cutting**

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**Company Name: Warner Bodies, Inc.  
Address City IN Zip: 1699 South 8th Street, Noblesville, IN  
CP: 057-14829  
Plt ID: 057-00043  
Reviewer: Madhurima D. Moulik  
Date: Sep 24, 2001**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Submerged Arc	40	1.5		0.036	0.011			2.160	0.660	0.000	0	0.660
EMISSION TOTALS												
Potential Emissions lbs/hr								2.16				0.66
Potential Emissions lbs/day								51.84				15.84
Potential Emissions tons/year								9.46				2.89

**METHODOLOGY**

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

Welding and other flame cutting emission factors are from an internal training session document.

**Appendix A: Emissions Calculations**

Page 8 of 8 TSD App A

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Bake Ovens and Space Heaters**

**Company Name: Warner Bodies, Inc.**

**Address City IN Zip: 1699 South 8th Street, Noblesville, IN**

**CP: 057-14829**

**Plt ID: 057-00043**

**Reviewer: Madhurima D. Moulik**

**Date: Sep 24, 2001**

Emissions in tons/yr

Equipment	PM	PM-10	SO2	NOx	VOC	CO	Toluene	MIBK	MEK	4,4 Diphenyl methane diisocyanate	Combination HAPs
Wrecker Booth	4.9	4.9			3.2		0.32	0.22	2.57	0.16	3.27
Utility Body Booth	3.5	3.5			10.7		0.69	0.25	5.93	0.14	7.01
Clean Up Solvents					1.5						
Heating Units+Bake ovens	0.5	0.5		6.4	0.4	5.4					
Welding Units	9.46	9.46									2.89
<b>Total (tons/yr)</b>	<b>18.36</b>	<b>18.36</b>		<b>6.4</b>	<b>15.8</b>	<b>5.4</b>	<b>1.01</b>	<b>0.47</b>	<b>8.5</b>	<b>0.3</b>	<b>13.17</b>